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FUNGI ASSOCIATED WITH PINES IN THE BLACK HILLS

by

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INTRODUCTION

This paper summarizes reports of fungi associated with pines in the Black Hills of South Dakota. Some reports from the Bearlodge Mountains of Wyoming are also included. The aim of this list is to provide a reference for those wanting to examine in detail the occurrence and distribution of forest fungi in this region. It also presents a framework to which past and future reports can be added when they are found. The following information is given for each report: location, date discovered or reported, person who made the collection or report, comments (source of information). The primary sources of information and abbreviations used for them are as follows: Rocky Mountain Forest and Range Experiment Station herbarium (RMFRES and the accession number), Forest Pest Management Annual Report for Region 2 (FPM), correspondence in the Archives of the RMFRES (correspondent's name and date of correspondence), unpublished survey reports of the South Dakota Division of Forestry (SDDF) and of the FPM Rapid City Service Center of the FPM (RCSC and year of the survey) and published papers. "?" means some information could not be found. "RD" is the abbreviation used for ranger district. Unless otherwise noted, all reports refer to ponderosa pine as the host.

LIST OF RECORDS

Androdia alpina (Litsch.) R.L. Gilbertson & Ryvarden
=Poria alpina Litsch.

Higgens Gulch (T6NR1E: 34), 7/14/65, T.E. Hinds, associated with brown rot (RMFRES 3773C, Hinds 1968, 1971).

Androdia sinuosa (Fr.: Fr.) P. Karst.
=Poria vaporaria (Pers.: Fr.) Cke

Hubert Creek (T4SR5E: 34), 7/15/65, T.E. Hinds, associated with brown cubical trunk rot of dead, down tree (RMFRES 3583F, Hinds 1968, 1971).

Androdia variiformis (Peck) Donk
=Trametes variiformis (Peck) Peck

Harney RD, 2/22/38, T.R. Moberg, on trunk (RMFRES 5773A).

Armillaria mellea (Vahl:Fr.) P. Kumm.

Black Hills (location unspecified), 1965, T.E. Hinds, found on slash (Hinds 1968, 1971);

Black Hills Experimental Forest (study plot 1205.14), 10/18/71, ? (unpublished station report 1971);

Black Hills Experimental Forest (study plot 1205.14 and 1205.11), 1972, ? (unpublished station report 1972, J.L. van Deusen Nov. 3, 1972);

Black Hills (site unspecified), 1975, ?, noted to have been a problem in a few stands (FPM 1975);

Black Hills Experimental Forest (Pinwheel experiment - plot 1205.11), 9/12-14/78, D. W. Johnson, R.L. James and J.P. Linnane, the fungus was producing fruiting bodies on dead stumps throughout the area (G.L. Downing October 4, 1978);

Dalton Picnic Ground, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, the fungus was fruiting but it was not associated with tree mortality (G.L. Downing October 4, 1978);

Northern Black Hills (T5NR5E, T4NR4E, T4NR5E, T3NR2E, T3NR3E, T3NR4E), 1984, T.E. Hinds, L.R. Fuller, E.D. Lessard, and D.W. Johnson (Hinds et al. 1984);

Nemo RD and Custer RD (sites unspecified), 1985, G. Lessard, D.W. Johnson, T.E. Hinds, and W.H. Hoskins (Lessard et al. 1985);

Lawrence County (location unspecified), 5/10/90, R. Dorset, associated with trees on 1 acre of natural forest (SDDF);

Lawrence County (location unspecified), 5/22/90, R. Dorset, associated with 3 trees over .1 acre of natural forest (SDDF);

Spearfish RD (T5NR1E 1, 20, 22, T5NR2E 6, T6NR2E 30, 31, T4NR2E 17, 19, 20, T4NR1E 2, 3, 6, 7, 8, 10, 15, 18, 20, 21, 22, 25, 26, 27, 28, 31, 33, 34, T3NR1E 6, 7, 8, 10, 17, 18, 19, 20, 35, 36, T3NR2E 3, 4, 9, 10, 16, 17, 18, T3NR2E 29, 30, 31, 33), 8/90, J.E. Lundquist (RCSC 1990);

Nemo RD (T5NR5E 31, T4NR5E 5, 6, 8, 16, 29, T4NR4E 1, T3NR2E 24, 16, 17, T3NR3E 13, 17, 19, T3NR3E 24, 25, T3NR4E 1, T3NR5E 7, T2NR3E 4, T2NR4E 11, T2NR5E 8, 9, 16, 17), 9/90, J.E. Lundquist (RSCS 1990);

Elk Mt. RD (T2NR1E 1, 2, 11, 13, T2NR1E 23, 36, T1NR1E 16, 22, 34, 36, T1SR1E 3, 9, 15, 22, 23, 24, 28, T2SR1E 16, 21, 24, T2SR2E 19), 9/90, J.E. Lundquist (RCSC 1990);

Pactola RD (T2NR2E 20, 21, 28, 33, 34, T2NR4E 13, 14, 15, T2NR4E 22, T1NR5E 7, 11, 13, 16, T1NR6E 18, 19, 20, 29, 30, 32), 9/90, J.E. Lundquist (RCSC 1990);

Harney RD (T2NR3E 22, 23, 27, 31, 32, T1NR2E 2, 3, 11, 12, 27, 32, 33, 34, 35, 36, T1NR3E 17, 21, T1SR2E 19, 28, 29, 36, T1SR3E 11, 12, 13, 14, 26, T1SR4E 5, 6, 7, 8, 17, 18, 20, 27, 29, 32, 33, 34, T2SR3E 8, 13, 16, 17, 20, 24, 28, T2SR4E 3, 4, 6, 7, 9, 16, 19, T3SR2E 1), 10/90, J.E. Lundquist (RCSC 1990);

Custer RD (T2SR4E 3, 4, 8, T3SR4E 17, 18, T3SR2E 14, 16, T3SR3E 2, 3, 4, 9, 10, 11, 12, 14, 15, 16, 28, 33, T4SR2E 12, 26), 10/90, J.E. Lundquist (RCSC 1990);

Bearlodge RD (T55NR63W 36, T54NR63W 1, 12, T54NR62W 18, T53NR63W 1, 33, T52NR63W 5, 8, 17, 18, 20, 33), 10/90, J.E. Lundquist (RCSC 1990).

Calocera cornea (Batsch: Fr.) Fr.

Near Wind Cave, 8/7-9/29, F.J. Seaver & P.F. Shope, on dead tree (Seaver and Shope 1956).

Coniophora puteana (Schum.: Fr.) Karst.

Black Hills (location unspecified), 1965, T.E. Hinds, isolated from brown rot in a single tree (Hinds 1968, 1971).

Coniophora sp.

Higgins Gulch (T6NR1E 34), 7/14/65, T.E. Hinds (RMFRES 3561B, Hinds 1968, 1971);

Golden West (T2NR3E 34), 7/15/65, T.E. Hinds, associated with cubical trunk/sap rot on dead, down trees (RMFRES 3572-C, Hinds 1968, 1971);

Buck Springs (T44NR1E 11), 7/16/65, T.E. Hinds (RMFRES 3564B, Hinds 1968, 1971).

Coriolus zonatus (Nees per Fr.) Quel.
=Polyporus zonatus Fr.

Black Hills (location unspecified), 1965, T.E. Hinds (Hinds 1968).

Cronartium coleosporioides Arth.
=Cronartium filamentosum Hedges., nom. nud.

Roubaix (URRS Plot 52, Tree No. 1), 9/3/36, Stuart Andrews (RMFRES 4028C);

Near Roubaix, 7/7/59, R.S. Peterson, pycnia and aecia sporulating together (RMFRES 1747E, Peterson 1959);

Near Lead, 7/7/59, R.S. Peterson, pycnia and aecia sporulating together (Peterson 1959);

Cronartium comandrae Peck
=Cronartium pyriforme Hedge. & Long

Black Hills (locations unspecified), 7/35 and before, L. Luckinbill, widespread (Luckinbill 1935);

Custer, 7/14/35, S.R. Andrews, T.R. Moberg, and L.S. Gill (RMFRES 4296E);

Roubaix (southeast of Roubaix in burn), 5/19/60, R.S. Peterson, 12 yr-old trees (RMFRES 1861);

Near Moskee, Crook Co., WY, 8/3/60, R.S. Peterson (RMFRES 1906P);

Harney RD (McVey Burn T1SR4E 4); 7/11/90; B.W. Geils (RCSC 1990).

Dacrymyces capitatus Schwein.
=Dacrymyces involutus Schwein.

Legion Camp, 8/7-9/29, F.J. Seaver & Shope, on dead decorticated tree (Seaver and Shope 1936).

Dacrymyces stillatus Nees: Fr.
=Dacrymyces abietinus (Pers.) J. Schrot.

Near Wind Cave, 8/7-9/29, F.J. Seaver & P.F. Shope, on dead decorticated wood (Seaver and Shope 1936).

Dichomitus squalens (P. Karst.) D. Reid
=Polyporus anceps Peck
=Polyporus ellisianus (Murr.) Sacc. & Trott.

Black Hills (location unspecified), 1903, Von Schrenk, associated with red rot in living trees (Von Schrenk 1903, Andrews 1955, Hinds 1968);

Custer, 5/4/17, J.R. Weir (RMFRES 4227G);

Custer, 8/1/18, J.R. Weir (RMFRES 4215G);

Custer, 6/25/34, L.L. Davis (RMFRES 4074D);

Black Hills (location unspecified), before 1937, T.R. Moberg (Andrews and Gill 1941);

Near Nemo (3 miles from Nemo), 2/9/38, T.R. Moberg (RMFRES 4029C);

Black Hills (location unspecified), 1941, S.R. Andrews and L.S. Gill (Andrews and Gill 1941);

Higgins Gulch (T6NR1E 34), 7/14/65, T.E. Hinds, associated with white pocket rot of dead Pinus ponderosa (RMFRES 3565B).

Elytroderma deformans (Weir) Darker
=Hypoderma deformans Weir

South Dakota (location unspecified), before 1960, ? (Anonymous 1960);

Elk Mt. RD, 4/5/60, F.B. Knight and A Landgraf (RMFRES 1800C);

Spearfish RD (south of Cement Ridge Lookout), 5/16/60, R.S. Peterson (RMFRES 2051P);

Nemo, Harney, and Custer RDs, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, brooms caused by this fungus were infrequent and widespread and the condition was especially noteable at Little Spearfish Canyon (G.L. Downing October 4, 1978);

South Dakota (location unspecified), 1982, ? (SDDF);

Spearfish RD (T5NR1E 20, T4NR2E 36, T4NR1E 26, 28, T3NR1E 3, 10 15), 8/90, J.E. Lundquist (RCSC 1990);

Nemo RD (T4NR5E 5, T3NR2E 33, T3NR4E 18, T2NR3E 9, 14, 23, T2NR5E 7, 9, 29), 9/90, J.E. Lundquist (RCSC 1990);

Pactola RD (T2NR4E 14, T1NR5E 15, 17, T1NR6E 19, 29 31, T1SR5E 1, T1SR6E 21), 9/90, J.E. Lundquist (RCSC 1990);

Elk Mt. RD (T1SR1E 22, T2SR1E 24, T4SR2E 11), 9/90, J.E. Lundquist (RCSC 1990);

Harney RD (T2NR3E 28, 32, T1NR3E 22, T1NR4E 28, T1SR2E 35, T1SR3E 4, 6, 8, 14, 18, T2SR2E 35, T2SR3E 7, 12, T2SR4E 5, T3SR2E 11), 10/90, J.E. Lundquist (RCSC 1990);

Custer RD (T2SR3E 33, T3SR4E 5, 7, 18, T3SR3E 4, 8, 10, 16, 28, T4SR2E 13, 26, T4SR3E 31, 32, T4SR4E 22, T5SR2E 14, T5SR3E 3, 6), 10/90, J.E. Lundquist (RCSC 1990);

Bearlodge Mt. RD (T53NR63W 14), 10/90, J.E. Lundquist (RCSC 1990).

Endocronartium harknessii (J.P. Moore) Y. Hiratsuka
=Peridermium harknessii J.P. Moore

Custer, 7/29/35, S.R. Andrews and L.S. Gill (RMFRES 4308G);

Rapid City (Dinosaur Ridge), 7/7/59, R.S. Peterson (RMFRES 1778);

Pinus contorta, Nahant, 7/8/59, R.S. Peterson (RMFRES 1745F, Peterson 1959);

Rochford, 7/8/59, R.S. Peterson (RMFRES 1779E);

Near Roubaix (in burned areas), 1959, R.S. Peterson, natural and planted seedlings and 40- to 60-yr-old trees affected (Peterson 1959);

Windy Flats, 1959, R.S. Peterson, nearly all trees had galls (Peterson 1959);

Pinus sylvestris, Near Roubaix, 1959, R.S. Peterson (Peterson 1959);

Black Hills (site unspecified), 1976, ?, noted to be a problem in some stands (FPM 1976);

Rapid City, 1977, ?, heavy on ornamental plantings (FPM 1977);

McVey Burn, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, severe infection on trees planted on site burned in 1939 (G.L. Downing October 4, 1978);

Big Elk Burn, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, severe infection on trees planted on site burned in 1949 (G.L. Downing October 4, 1978);

Matt Burn, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, slight infection on trees planted on site burned in 1940 (G.L. Downing October 4, 1978);

Buskala Burn, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, slight infection on trees planted on site burned in 1947 (G.L. Downing October 4, 1978);

Lime Kiln, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, severe infection on trees naturally regenerated on site burned in 1948 (G.L. Downing October 4, 1978);

Bull Flats, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, slight infection on trees regenerated naturally on site burned in 1958 (G.L. Downing October 4, 1978);

Freeland Basin Burn, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, slight infection on trees regenerated naturally on site burned in 1968 (G.L. Downing October 4, 1978);

Dewey Burn, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, slight infection on trees regenerated naturally on site burned in 1966 (G.L. Downing October 4, 1978);

Ventling Draw, 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, slight infection on trees regenerated naturally on site burned in 1966 (G.L. Downing October 4, 1978);

Pennington County (location unspecified), 11/01/78, R. Dorset (SDDF);

Black Hills (sites unspecified), 1979, ? (FPM 1979);

Pennington County (location unspecified), 08/01/80, R. Dorset (SDDF);

Lawrence County (location unspecified), 05/18/82, R. Dorset, recorded on 2 ornamental trees (SDDF);

Pennington County (location unspecified), 05/25/83, R. Dorset, recorded on 1 ornamental tree (SDDF);

Pennington County (location unspecified), 07/17/84, R. Dorset, recorded on 2 ornamental trees (SDDF);

Pennington County (location unspecified), 08/14/84, R. Dorset, associated with hip cankers on 4 trees (SDDF);

Pennington County (location unspecified), 01/25/85, R. Dorset, recorded on 5 ornamental trees over 1 acre (SDDF);

Custer County (location unspecified), 08/28/87, R. Dorset, recorded on 5 trees over 1 acre of natural forest (SDDF);

Butte County (location unspecified), 12/15/87, R. Dorset, recorded on 2 trees (SDDF);

Pennington County (location unspecified), 06/02/88, R. Dorset, recorded on 10 ornamental trees (SDDF);

Custer County (location unspecified), 12/31/89, R. Dorset, associated with trees in natural forest (SDDF);

Pennington County (location unspecified), 12/31/89, R. Dorset, associated with trees in natural forest (SDDF);

Nemo RD (T4NR5E 16, 21, 32, T4NR2E 36), 9/90, J.E. Lundquist (RCSC 1990);

Pactola RD (T1NR6E 31, 32), 9/90, J.E. Lundquist (RCSC 1990);

Harney RD (T1NR4E 33, T1SR4E 6, 22, T1SR5E 5,6,7, T2SR2E 2), 10/90, J.E. Lundquist (RCSC 1990);

Custer RD (T3SR4E 18, T3SR3E 12, T4SR2E 12, 13, T4SR3E 33, T4SR4E 27, T5SR2E 4, 16, T5SR4E 20), 10/90, J.E. Lundquist (RCSC 1990);

Bearlodge Mt. RD (T53NR63W 1), 10/90, J.E. Lundquist (RCSC 1990).

Fomitopsis pinicola (Sw.: Fr.) P. Karst.
=Fomes pinicola (Sw.: Fr.) Cke

Near Legion Camp, 8/7-9/29, F.J. Seaver and P.F. Shope, on dead trees (Seaver and Shope 1936);

Sheridan, S.D., 12/29/37, T.R. Moberg (RMFRES 4241G);

Nemo RD, 5/18/60, R.S. Peterson, noted to be among the most common fungi fruiting in Black Hills (RMFRES 1804B);

Nemo RD, 1/12/65, J. Stewart and A. Landgraff, on dead tree (RMFRES 3483C);

Buck Springs (T44NR1E: 11), 7/14/65, T.E. Hinds (RMFRES 3584, Hinds 1968, 1971);

Higgins Gulch (T6NR1E 11), 7/14/65, T.E. Hinds (RMFRES 3585, Hinds 1968, 1971);

Nemo, Harney and Custer RDs (locations unspecified), 9/12-14/78, D.W. Johnson, R.L. James and J.P. Linnane, the most common decay organism of dead ponderosa pine (G.L. Downing October 4, 1978).

Ganoderma applanatum (Pers. per S.F. Gray) Pat.
=Fomes applanatus (Pers.: Wallr.) Gill

Black Hills (location unspecified), 1965, T.E. Hinds (Hinds 1968).

Gloeophyllum odoratum (Wulf.: Fr.) Fr.
=Trametes americana Overh., nom. inval.

Hubert Creek (T4SR5E: 7), 7/15/65, T.E. Hinds, brown cubical trunk rot of dead, down trees (RMFRES 3569C, Hinds 1968, 1971).

Gloeophyllum sepiarium (Wulf.: Fr.) P. Karst.
=Lenzites sepiara (Wulf.: Fr.) Fr.

Black Hills (location unspecified), 1965, T.E. Hinds, associated with brown sapwood rot and sometimes heartrot of logs, timber, and slash (Hinds 1968, 1971).

Gloeoporus dichrous (Fr.: Fr.) Bres.
=Polyporus dichrous Fr.: Fr.

Higgins Gulch (T6NR1E: 34), 7/14/65, T.E. Hinds, associated with white sap rot on dead, down tree (RMFRES 3575C, Hinds 1968, 1971).

Grandinia granulosa (Pers.: Fr.) Fr.
=Hyphodontia aspera (Fr.) Erikss.
=Odontia aspera (Fr.) Bourd. & Galz.

Black Hills (location unspecified), 1965, T.E. Hinds, on slash (Hinds 1968, 1971).

Inonatus tomentosus (Fr.: Fr.) S. Teng

Pennington County (location unspecified), 07/25/90, R. Dorset, associated with root rot on trees over .1 acre in natural stands (SDDF).

Junghuhnia collabens (Fr.) Ryvarden
=Poria rixosa (P. Karst.) P. Karst.

Higgins Gulch (T6NR1E: 34), 7/14/65, T.E. Hinds (RMFRES 3570C, Hinds 1968, 1971, Lombard and Gilbertson 1966).

Laetiporus sulphureus (Bull.: Fr.) Fr.
=Polyporus sulphureus (Bull.: Fr.)

Black Hills (location unspecified), 1965, T.E. Hinds, on slash (Hinds 1968, 1971).

Lophodermium cerina (Darker) Darker

Eastern portions of Black Hills (Deadwood south to Custer and east to Rapid City), 7/80, ?, associated with needlecast (FPM 1981);

Pennington County (location unspecified), 04/20/83, R. Dorset, recorded on 8 ornamental trees over 1 acre (SDDF);

Meade County (location unspecified), 07/05/83, R. Dorset, recorded on 1 tree (SDDF);

Pennington County (location unspecified), 08/01/83, R. Dorset, recorded on 1 ornamental tree (SDDF);

Meade County (location unspecified), 10/24/83, R. Dorset, recorded on 2 ornamental trees (SDDF);

Pennington County (location unspecified), 04/18/85, R. Dorset, recorded on 3 trees over 1 acre of natual forest (SDDF);

Pennington County (location unspecified), 05/03/85, R. Dorset, recorded on 1 ornamental tree (SDDF).

Lophodermium pinastri (Schrad.: Fr.) Chev.

Pennington County (location unspecified), before 1970, ? (Mankin 1969).

Merulius sp.

Hubert Creek (T4SR5E: 7), 7/15/65, T.E. Hinds, associated with brown cubical trunk rot of dead, down trees (RMFRES 3571C, Hinds 1968, 1971).

Ophiostoma ips (Rumbold) Nannf.

Pinus sp., South Dakota (probably the Black Hills), before 1960, ? (Anonymous 1960).

Ophiostoma minus (Hedgc.) Syd. & P. Syd.
=Ceratostomella pini Munch

Pinus sp., Cement Ridge, 11/5/53, R.W. Davidson (RMFRES 1447C).

Peniophora rufa (Fr.: Fr.) Boidin
=Cryptochaeta rufa (Fr.) Karst.

Black Hills (location unspecified), 1965, T.E. Hinds (Hinds 1968).

Peniophora sp.

Higgins Gulch (T6NR1E: 34), 7/14/65, T.E. Hinds, associated with white stringy sap rot of old dead, down tree (RMFRES 3581F, 3574C, Hinds 1968, 1971).

Phaeolus schweinitzii (Fr.: Fr.) Pat.
=Polyporus schweinitzii Fr.: Fr.

Nemo (near WRR Plot 51), 7/30/36, L.S. Gill, fruiting on ground near base of snag (RMFRES 4179F);

Nemo (5 miles from Nemo near WRR Plot 51), 7/31/36, L.S. Gill and S.R. Andrews (RMFRES 4055C);

Higgins Gulch, 1962, T.E. Hinds, on living trees (RMFRES 3000F, Hinds 1968, 1971);

Lawrence County (location unspecified), 5/22/90, R. Dorset, associated with 3 trees over .1 acre of natural forest (SDDF).

Phanerochaete gigantea (Fr.: Fr.) S.S. Rattan et al.
=Peniophora gigantea (Fr.:Fr.) Massee

Tigerville CCC Camp, 2/3/38, T.R. Moberg (RMFRES 4073D);

Higgins Gulch (T6NR1E: 24), 7/14/65, T.E. Hinds, associated with white sap rot of dead, down tree (RMFRES 3577C, Hinds 1968, 1971);

Hubert Creek (T4SR5E: 7), 7/15/65, T.E. Hinds, associated with brown cubical trunk rot of dead, down tree (RMFRES 3662B, Hinds 1968, 1971);

Hazelrodt Campground, 6/4/69, S.R. Andrews and T.E. Hinds, on 4-yr-old tree (RMFRES 3955C).

Phellinus igniarius (L.: Fr.) Quel.

Black Hills (location unspecified), 1965, T.E. Hinds (Hinds 1968).

Phellinus pini (Thore.: Fr.) A. Ames

Rochford (west of town), 6/14/61, R.S. Peterson and W.P. Schacht, on dead, standing Pinus ponderosa (RMFRES 2041F).

Phellinus viticola (Schwein.: Fr.) Donk
=Fomes viticola (Schwein.: Fr.) J. Lowe

Custer, 6/25/34, ? (RMFRES).

Phlebiella vaga (Fr.: Fr.) P. Karst.
=Cristella sulphurea (Pers.: Fr.) Donk

Higgins Gulch (T6NR1E: 34), 7/14/65, T.E. Hinds, associated with white stringy sap rot on old dead, down trees (RMFRES 3579C, Hinds 1968, 1971).

Poria cinerascens (Bres.) Sacc. et Syd.

Buck Springs (T44NR1E: 11), 7/16/65, T.E. Hinds, associated with white stringy sap rot of dead, down tree (RMFRES 3563B, Hinds 1968, 1971).

Poria sp.

Black Hills (location unspecified), 1965, T.E. Hinds, on slash (Hinds 1968, 1971).

Pycnoporus sanguineus (L.: Fr.) Murrill
=Polyporus sanguineus L.: Fr.

Black Hills (location unspecified), 1965, T.E. Hinds, on slash (Hinds 1968, 1971).

Serpula himantioides (Fr.: Fr.) P. Karst.
=Merulius himantioides Fr.: Fr.
=Merulius americana Burt

Black Hills (location unspecified), 1965, T.E. Hinds, associated with old trunk wounds (Hinds 1968, 1971).

Sphaeropsis sapinea (Fr.: Fr.) Dyko & Sutton
=Diplodia pinea (Desm.) Kickx

Johnson Siding (T2NR5E), 7/79, R.L. James, D.W. Johnson and W.G. Telfer (James, Johnson and Telfer 1979, Johnson, Peterson and Dorset 1985);

Nemo Road (T2NR6E), 7/79, R.L. James, D.W. Johnson and W.G. Telfer (James, Johnson and Telfer 1979, Johnson, Peterson and Dorset 1985);

Hill City (T1SR5E), 7/79, R.L. James, D.W. Johnson and W.G. Telfer (James, Johnson and Telfer 1979, Johnson, Peterson and Dorset 1985);

Custer State Park (T4SR5E), 7/79, R.L. James, D.W. Johnson and W.G. Telfer (James, Johnson and Telfer 1979, Johnson, Peterson and Dorset 1985);

Wind Cave (T5SR5E), 7/79, R.L. James, D.W. Johnson and W.G. Telfer (James, Peterson and Telfer 1979, Johnson, Peterson and Dorset 1985);

Pennington County (location unspecified), 07/01/79, R. Dorset (SDDF);

Custer County, (location unspecified), 08/01/79, R. Dorset (SDDF);

Fall River County (location unspecified), 09/01/79, R. Dorset (SDDF);

Fall River County (location unspecified), 02/01/80, R. Dorset (SDDF);

Pennington County (location unspecified), 06/01/80, R. Dorset (SDDF);

Rockerville (T1NR5E: 10, T1NR6E: 13), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Nemo Road (T2NR6E: 36), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Pactola Work Center (T2NR5E: 16), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Petrified Forest Campground (T3NT6E: 12), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Fort Meade (T5NR5E: 14), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Higgins Gulch (T7NR1E: 36), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Baver's Camping, Hill City (T2SR4E: 1), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Teepee Work Center (T4SR2E: 6), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Cold Spring Creek (T5SR5E: 28), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Battle Mountain (T7SR6E: 18), 7/81, D.W. Johnson, G.W. Peterson and W.G. Telfer (Johnson, Peterson and Telfer 1981, Johnson, Peterson and Dorset 1985);

Pennington County (location unspecified), 05/13/82, R. Dorset, recorded on 2 ornamental trees (SDDF);

Pennington County (location unspecified), 06/07/82, R. Dorset, recorded on 8 ornamental trees (SDDF);

Pennington County (location unspecified), 06/24/82, R. Dorset, recorded on 8 ornamental trees (SDDF);

Pennington County (location unspecified), 08/03/82, R. Dorset, recorded on 2 ornamental trees (SDDF);

Pennington County (location unspecified), R. Dorset, 08/13/82, R. Dorset, recorded on 6 ornamental trees (SDDF);

Pennington County (location unspecified), 10/19/82, R. Dorset, recorded on 1 ornamental tree (SDDF);

Pennington County (location unspecified), 03/23/83, R. Dorset, recorded on 8 trees over 1 acre of natural forest (SDDF);

Pennington County (location unspecified), 04/20/83, R. Dorset, recorded on 2 ornamental trees (SDDF);

Meade County (location unspecified), 04/22/83, R. Dorset, recorded on 2 ornamental trees (SDDF);

Pennington County (location unspecified), 05/25/83, R. Dorset, recorded on 1 ornamental tree (SDDF);

Meade County (location unspecified), 7/5/83, R. Dorset, recorded on 20 trees in natural stand over 1 acre (SDDF);

Pennington County (location unspecified), 09/27/83, R.Dorset, recorded on 30 trees over 5 acres of natural forest (SDDF);

Lawrence County (location unspecified), 03/25/84, R. Dorset, recorded on 3 trees in natural stand (SDDF);

Pennington County (location unspecified), 06/15/84, R. Dorset, recorded on 1 ornamental tree (SDDF);

Pennington County (location unspecified), 06/18/84, R. Dorset, recorded on 8 ornamental trees (SDDF);

Pennington County (location unspecified), 03/13/85, R. Dorset, recorded on 6 trees over 2 acres of natural forest (SDDF);

Pennington County (location unspecified), 04/18/85, R. Dorset, recorded on 3 trees over 1 acre of natural forest (SDDF);

Pennington County (location unspecified), 05/20/85, R. Dorset, recorded on 5 ornamental trees over .5 acres (SDDF);

Meade County (location unspecified), 07/24/85, R. Dorset, recorded on 3 ornamental trees over 1 acre (SDDF);

Pennington County (location unspecified), 08/07/85, R. Dorset, recorded on 2 ornamental trees (SDDF);

Pennington County (location unspecified), 08/13/85, R. Dorset, recorded on 2 ornamental trees over 1 acre (SDDF);

Pennington County (location unspecified), 08/15/85, R. Dorset, recorded on 600 trees over 600 acres of natural forest (SDDF);

Pennington County (location unspecified), 05/05/86, R. Dorset, recorded on 10 ornamental trees over 1 acre (SDDF);

Meade County (location unspecified), 08/05/86, R. Dorset, recorded on 2 ornamental trees (SDDF);

Meade County (location unspecified), 04/13/87, R. Dorset, recorded on 1 ornamental tree (SDDF);

Meade County (location unspecified), 05/04/87, R. Dorset, recorded on 3 ornamental trees (SDDF);

Pennington County (location unspecified), 06/15/87, R. Dorset, recorded on 6 ornamental trees (SDDF);

Pennington County (location unspecified), 06/19/87, R. Dorset, recorded on 1 tree in natural stand (SDDF);

Meade County (location unspecified), 07/14/87, R. Dorset, recorded on 4 ornamental trees (SDDF);

Pennington County (location unspecified), 08/12/87, R. Dorset, recorded on 1 ornamental tree (SDDF);

Pennington County (location unspecified), 08/18/87, R. Dorset, recorded on 5 ornamental trees (SDDF);

Lawrence County (location unspecified), 10/02/87, R. Dorset, recorded on 3 ornamental trees (SDDF);

Pennington County (location unspecified), 11/23/87, R. Dorset, recorded on 3 ornamental trees (SDDF);

Pennington County (location unspecified), 02/09/88, R. Dorset, recorded on 100 trees over 30 acres in natural forest (SDDF);

Pennington County (location unspecified), 03/14/88, R. Dorset, recorded on 5 ornamental trees (SDDF);

Pennington County (location unspecified), 03/17/88, R. Dorset, recorded on 1 ornamental tree (SDDF);

Pennington County (location unspecified), 04/21/88, R. Dorset, recorded on 1 ornamental tree (SDDF);

Pennington County (location unspecified), 05/20/88, R. Dorset, recorded on 25 trees over 5 acres in natural forest (SDDF);

Pennington County (location unspecified), 05/27/88, R. Dorset, recorded on 7 trees on 1 acre of natural stands (SDDF);

Pennington County (location unspecified), 07/20/88, R. Dorset, recorded on 1 ornamental tree (SDDF);

Pennington County (location unspecified), 09/09/88, R. Dorset, recorded on 1 ornamental tree (SDDF);

Fall River County (location unspecified), 02/09/89, R. Dorset, recorded on 1 ornamental tree (SDDF);

Pennington County (location unspecified), 04/18/89, R. Dorset, recorded on 1 ornamental tree (SDDF);

Fall River County (location unspecified), 05/01/89, R. Dorset, recorded on 3 ornamental trees (SDDF);

Meade County (location unspecified), 15/11/89, R. Dorset, recorded on 1 ornamental tree (SDDF);

Fall River County (location unspecified), 05/12/89, R. Dorset, recorded on 20 trees over .5 acres of natural forest (SDDF);

Pennington County (location unspecified), 05/25/89, R. Dorset, recorded on 6 ornamental trees (SDDF);

Pennington County (location unspecified), 07/10/90, R. Dorset, recorded on 1 ornamental tree (SDDF).

Stereum hirsutum (Wild: Fr.) S.F. Gray

Black Hills (location unspecified), 1965, T.E. Hinds (Hinds 1968).

Trichaptum abietinum (Dickson: Fr.) Ryv.
=Polystictus abietinus (Dickson: Fr.) Cke.

Near Legion Camp, 8/7-9/29, F.J. Seaver & P.F. Shope, on dead trees (Seaver and Shope 1936);

Galena, 1/21/38, T.R. Moberg (RMFRES 4151E);

Nemo RD, 5/10/60, ?, with lichens on dead branch (RMFRES 1954).

Vararia granulosa (Fr.) M. Laur.

Black Hills (location unspecified), 1962, T.E. Hinds, On slash (Hinds 1968, 1971).

Veluticeps berkeleyi (Berk.: Curt.) Cke.
=Veluticeps fusca Humphrey & Long

Black Hills (location unspecified), 8/7/29, Seaver, Henderson and Shope (Overholz 1933);

Black Hills (location unspecified), 1962, T.E. Hinds, caused extensive brown rot in butt and trunk in older trees and Hinds (1968) states that "it may be the most damaging brown rot of pines in the Black Hills." (Gilbertson, Lombard and Hinds 1968, Hinds 1978, 1971);

Custer RD, Hill City RD, and Rochford RD, during or before 1968, T.E. Hinds, caused extensive butt and trunk rot and cull in older trees (Gilbertson, Lombard and Hinds 1968, Andrews 1971, Hinds 1971).

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